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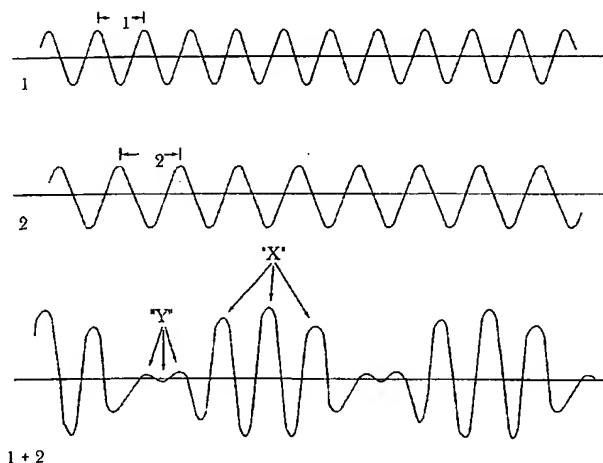
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(54) Title: HIGH EFFICIENCY SOLAR CELLS



(57) Abstract: The present invention relates to improvements in solar cell and solar panel photovoltaic materials which cause the solar cells/panels to operate more efficiently. In particular, the present invention focuses primarily on matching or modifying particular incident light energies within the photoreactive portion of the solar spectrum to predetermined energy levels in a solar cell photovoltaic substrate material required to excite, for example, electrons in at least a portion of the substrate material in a desirable manner. The portions (X) and (Y) represent areas where the two waves (1) and (2) have at least partially constructively interfered, and partially destructively interfered, respectively. Depending upon whether the portion (X) corresponds to desirable or undesirable wavelengths, the portion (X) could enhance a positive or negative effect in the substrate material. Similarly, the portion (Y) may correspond to the effective loss of either a positive or negative effect.

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